



ULTRONIC SYSTEMS
CORP.

7300 N. CRESCENT BOULEVARD • PENNSAUKEN, N.J. 08110 • NOrmandy 3-0712 • TWX 710-892-0739

6 October 1965

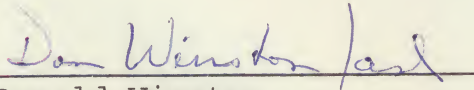
Vassar College
Department of Economics,
Sociology & Anthropology
Poughkeepsie, New York

Attention: Theodor H. Nelson
Instructor in Sociology

Dear Mr. Nelson:

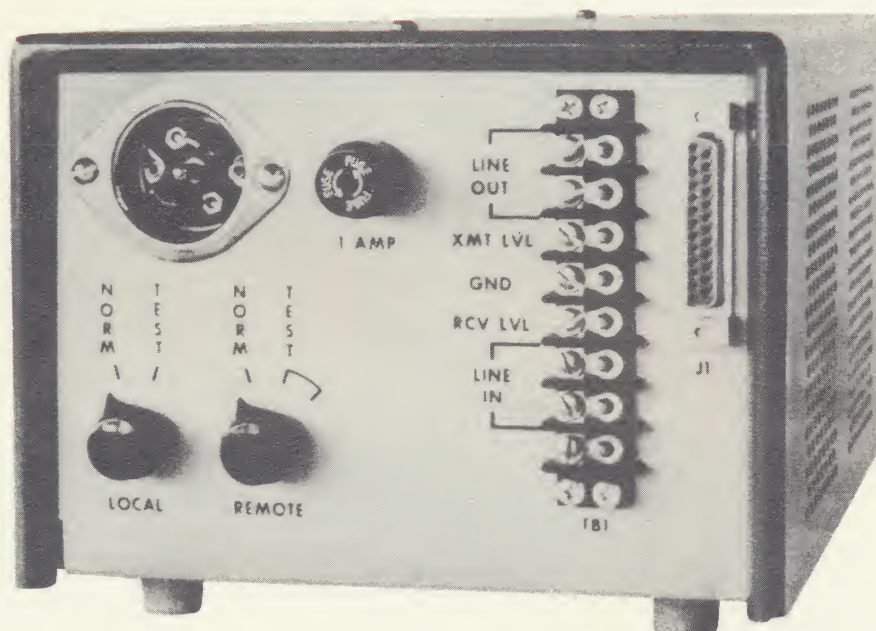
A copy of our Data Pump brochure is enclosed as requested in your letter dated 24 September. If you have further interest in our product, or if we can be of assistance in any way, please let us know.

Yours very truly,


Donald Winston
Marketing Manager
Sub-Systems

(awl)

Enclosure



DATA PUMP™

The low cost data set that tests with the best in its speed range

DATA PUMP™ Series 1200 is a solid state transceiver utilizing FSK modulation for data rates up to 1200 bits per second. It is designed for use on FCC Tariff 237 Schedule 4 lines and equipped with carrier control so that the carrier may be keyed on and off or strapped on permanently. Simplex (2 wire) or full duplex (4 wire) operation are possible.

Ultronic® originally designed this high-performance, low-price data set for use in our own system. Its speed and reliability have been proven by use in the Ultronic® nationwide Stockmaster® market information network.

Study the technical specifications on the back of this sheet. You'll see that DATA PUMP is comparable to the best in its speed range.

DATA PUMP SPECIFICATIONS

Transmitter

- a) Carrier frequencies
 - 1) Space (0) is 1200 cps
 - 2) Mark (1) is 2200 cps
- b) Transmit level
 - 1) Fixed at -8 ± 1 dbm for random data pattern
- c) Output impedance
 - 1) 600 ohms, balanced
- d) Data Input
 - 1) Levels: Space (0) is $+3$ to $+25$ volts
Mark (1) is -0.5 to -25 volts
 - 2) Impedance: 2700 ohms
- e) Carrier Control
 - 1) Levels: ON is $+3$ to $+12$ volts
OFF is -0.5 to -25 volts
 - 2) Impedance: ON is 1800 ohms
OFF is greater than 50K ohms

Receiver

- a) Sensitivity
 - 1) Greater than -33 dbm
- b) Receiver Pad
 - 1) Adjustable in four steps of attenuation (0, 4, 8, 12 db)
- c) Input impedance
 - 1) 600 ohms, balanced
- d) Data Output
 - 1) Levels: Space (0) is $+5.0$ volts
Mark (1) is -12 volts thru 1800 ohms
 - 2) Maximum current drain in space (0) is 5 ma.

Physical Characteristics

- a) Size
 - 1) $10\frac{3}{4} \times 7 \times 5\frac{1}{2}$ inches in length, width, height
- b) Weight
 - 1) $11\frac{3}{4}$ pounds

Power Requirements

- a) 117 VAC $\pm 10\%$ or 230 VAC $\pm 10\%$, 50/60 cps, Single phase, 0.25 amps.

Environment

- a) Operating ambient: $+20$ to $+50^\circ\text{C}$
- b) Storage ambient: -10 to $+65^\circ\text{C}$

Test Switches

- a) Local Test
 - 1) Connects transmitter output to receiver input thru 8 db pad
 - 2) Terminates transmit and receive lines in 600 ohms
 - 3) Activates carrier control to turn on carrier
- b) Remote Test
 - 1) Connects receiver Data Output to transmitter Data Input
 - 2) Activates carrier control to turn on carrier



ULTRONIC SYSTEMS CORP.

7300 N. CRESCENT BLVD., PENNSAUKEN,
NEW JERSEY TEL. 609-NO 3-0712